

REMARKS

Status of the Claims:

Claims 1-17 and 19-35 are now pending;

Claims 1-17-39 have been rejected;

Introduction

In the Office Action, portions of the specification were objected to because references to IEEE Standard 802.11 are allegedly unclear. Additionally, the amendment filed on December 14, 2006 has been objected to under 35 U.S.C. § 132(a) as allegedly introducing new matter into the disclosure.

Claims 3-9, 12-17, and 21-35 were rejected under 35 U.S.C. § 112, ¶2, as allegedly indefinite.

Claims 1-17 and 19-35 were rejected under 35 U.S.C. § 103(a) as allegedly anticipated by U.S. Patent App. Pub. 2003/0135762 by Macaulay (hereinafter “Macaulay”) in view of U.S. Patent No. 7,042,852 to Hrastar (hereinafter “Hrastar”).

Objection to the Specification and rejection of Claims 3-9, 12-17 and 21-35 under 35 U.S.C. § 112, ¶2 due to references to “IEEE Standard 802.11a/b/g”

The Examiner previously objected to the incorporation by reference of “IEEE Standard 802.11” in the Specification as not clearly disclosing which version of the standard is to be incorporated. Obviously, documents which were not in existence at the time of the filing of the application could not have been incorporated by reference into that application, and therefore

the version of the standard that was incorporated by reference into the application would be the version of the standard that was current as of the filing date.

References to “IEEE Standard 802.11” in the claims were similarly amended to read “IEEE Standard 802.11 a/b/g,” referring to the 802.11a, 802.11b, and 802.11g standards. The Examiner also objects to references to these standards on the grounds that the standards may evolve in the future, several drafts of the amendments were published, and “corrections have been published for at least 802.11b.” (Office Action, p. 3). The Examiner also objects to the use of the term “IEEE Standard 802.11” in the claims as improper use of a trademark to identify a particular material or product. (*Id.*) Applicant respectfully submits that citing or referring to IEEE standards, including IEEE Standard 802.11, is a common practice before the United States Patent and Trademark Office. A quick search conducted by applicant revealed numerous issued patents referring to IEEE standards, including 802.11, in both the description and claims, of which some examples are: U.S. Patent Nos. 6,697,337; 6,674,738; 6,847,330; 7,046,649; and 6,978,121. In addition, Macaulay, cited by the Examiner, refers to IEEE 802.11 throughout the description and claims.

Applicant respectfully submits that the Examiner’s objection to the specification and rejection of claims 3-9, 12-17 and 21-35 under 35 U.S.C. § 112, ¶2 should be withdrawn.

New Matter Objections

In the Office Action, the Examiner objected to the amendment filed on December 15, 2006, as introducing new matter into the disclosure because references to IEEE Standard 802.11 were narrowed to refer to IEEE Standard 802.11a/b/g. Applicant respectfully suggests that the Examiner’s characterization of these amendments as introducing new matter is incorrect.

At the time of filing, the entirety of IEEE Standard 802.11 was incorporated by reference into the application, including amendments a/b/g. Rephrasing references to IEEE Standard 802.11 to narrow the reference does not constitute the addition of new matter. *See* MPEP §2163.07.

Applicant respectfully submits that the objection based on the addition of new matter should be withdrawn.

Rejections under 35 U.S.C. § 103(a)

In the Office Action, claims 1-17 and 19-35 were rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Macaulay in view of Hrastar. Applicant respectfully traverses the rejections of record.

Independent claims 1 and 19 are directed to methods for unauthorized access attempts to a wireless system, including, *inter alia*,

maintaining a state table on said computer, said state table storing state information for said mobile units; and

operating said computer to compare format and state information of said one or more received data packets to selected requirements of said protocol-specified format and said stored state information

The Examiner alleges that, although Macaulay does not disclose maintaining a state table storing state information for the mobile units, where the state information is also used to signal an alert, Hrastar discloses this at column 28, line 64 – column 29, line 4; column 29, lines 12-17; and column 30, lines 35-43. Applicant respectfully disagrees with the Examiner's characterization of Hrastar. The cited portions of Hrastar fail to disclose at least maintaining a state table and comparing the format and state information of received data packets to a protocol-specified format and state information stored in the state table. For at least this reason, Hrastar cannot anticipate amended independent claims 1 and 19.

Hrastar is directed to “systems and methods for enhancing security associated with electronic communications.” (Hrastar, col. 1, lines 39-41). The system is designed for assessing security risks and identifying and responding to threats in wireless network environments. (*See Id.*, col. 1, lines 42-44). The system maintains a “state data store” as part of an “Intrusion Detection System,” which the Examiner cited in the Office Action as disclosing an example of the state table of the current invention. (*See* Office Action, page 7; *Id.*, col. 27, lines 43-44; col. 28, line 64 – col. 29, line 4).

However, the “state data store” of Hrastar only records “whether or not the device has been seen before and whether or not the station is unauthenticated and unassociated, authenticate, authenticated and associated, or unknown state information associated with the wireless computer network.” (Hrastar, col. 29, lines 12-17). While the system of Hrastar may be designed to detect a number of attacks, the state data store only stores very basic information such as whether a device has been seen before and whether the station is authenticated or associated.

In contrast, independent claims 1 and 19 relate to comparing the state information of received data packets to state information stored in a state table to detect unauthorized access to the wireless network. For instance, if the WEP flag of an incoming packet with an authorized MAC address is inconsistent with flag value stored in the state table for that MAC address, it may indicate a possible network intrusion attempt, and an alarm may be generated. (*See* Specification, para. 0022). Similarly, if the protocol version field of the Frame Control field of a packet is different from that stored in the state table for that mobile device or access point, an intrusion attempt may be underway. (*Id.*, para. 0023). Many different state information variables are stored in the state table, and each incoming packet is checked for inconsistencies.

(*See Id.*, para. 0022-0028).

As previously discussed, the portions of Hrastar cited by the Examiner for this proposition refer only to the storage and checking of information such as whether a device has been seen before (MAC addresses), and whether the device is authenticated or associated. (*See* Office Action, p. 7; Hrastar, col. 29, lines 12-17). Such a system is vulnerable to intrusion attempts wherein the intruder “spoofs” the MAC address of an authorized mobile device or access point, whereas the method of claims 1 and 19 could detect such an intrusion attempt by comparing the state information of packets transmitted to that stored in the state table. (*See* Specification, para. 0025-0026). Therefore, the combination of Macaulay with Hrastar does not disclose “maintaining a state table on said computer, said state table storing state information for said mobile units” or “operating said computer to compare format and state information of said one or more received data packets to selected requirements of said protocol-specified format and said stored state information,” as in claims 1 and 19.

For at least these reasons, Applicant respectfully submits that claims 1 and 19 are allowable over Macaulay in view of Hrastar. Since claims 2-17 and 20-35 depend from claims 1 and 19, respectively, Applicant also respectfully submits that they are in condition for allowance.

CONCLUSION

In view of the foregoing remarks, favorable reconsideration and allowance of claims 1-17 and 19-35 are respectfully solicited. In the event that the application is not deemed in condition for allowance, the Examiner is invited to contact the undersigned in an effort to advance the prosecution of this application.

Respectfully submitted,



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